

AMENDMENT TO THE CLAIMS

Claims 1-66. Cancelled.

67. (Currently amended) A local-area wireless communication system for use with a plurality of mobile devices, comprising:

a plurality of local base stations coupled to a local area network (LAN), the local base stations being configured to send and receive data over the LAN and to communicate wirelessly with the plurality of mobile devices;

the plurality of local base stations each having a network address on the LAN and are configured to send and receive data over the LAN using the network addresses;

a subscription server operating on the LAN, in communication with all of the local base stations, the subscription server configured to identify the local base stations covering one or more of the mobile devices, the subscription server enabling the local-area wireless communication system to locate mobile devices that are in communication with the local-area wireless communication system without requiring communication between the plurality of local base stations to locate the mobile devices;

each local base station being configured to maintain a routing cache based on communications received from other local base stations, the routing cache identifying which of the plurality of local base stations were last in contact with mobile devices from which the communications were initiated; and

each local base station being further configured to route an outgoing communication directed to a particular mobile device directly through a different local base station using the routing cache without requiring the local base station to access the subscription server and without sending information to other local base stations not involved in the communication; and

each local base station being further configured to access the subscription server when information needed to route the outgoing communication directed to the particular mobile device is not available in the local base station's routing cache.

68. (Previously presented) The system of claim 67, wherein the subscription server also logs subscription information for one or more of the mobile devices.

69. (Previously presented) The system of claim 67, wherein each local base station includes a subscription list that identifies the mobile devices currently covered by the identified base station.

70. (Previously presented) The system of claim 67, wherein the local base stations are configured to purge from the route cache data relating to any mobile device to which the local base station has not been in communication for a predefined interval of time.

71. (Previously presented) The system of claim 67, wherein the local-area wireless communication system operates within an office.

72. (Previously presented) The system of claim 67, further comprising:
a redirector configured to interface the local-area wireless communication system with a wide-area wireless network;
the plurality of local base stations being further configured to:
determine if an identified mobile device is currently in communication with the local-area wireless communication system when an outgoing communication is directed to the mobile device; and
either route the outgoing communication to the identified mobile device over the local-area wireless communication system if the identified mobile device is currently in communication with the local-area wireless communication system, or route the outgoing communication to the redirector if the identified mobile device is not currently in communication with the local-area wireless communication system.

73. (Previously presented) The system of claim 72, wherein the redirector is further configured to route outgoing communications over the wide-area wireless network;

whereby mobile devices are able to send and receive data while roaming between the wide-area wireless network and the local-area wireless communication system.

74. (Previously presented) The system of claim 72, wherein the plurality of mobile devices use a wide-area wireless network protocol to communicate over both the local-area wireless communication system and the wide-area wireless network

75. (Previously presented) The system of claim 72, wherein the plurality of local base stations each have a network address on the LAN and are configured to send and receive data over the LAN using the network addresses, and wherein the data received from a mobile device using the wide-area wireless network protocol is tunneled through the LAN using the network address for a local base station.

76. (Previously presented) The system of claim 72, wherein the redirector interfaces the local-area wireless communication system with the wide-area wireless network via a wide-area computer network.

77. (Previously presented) The system of claim 72, wherein the redirector is further configured to transfer electronic messages into an electronic mailbox.

78. (Previously presented) The system of claim 72, wherein the mobile devices transmit and receive electronic mail messages over the local-area wireless communication system and the wide-area wireless network.

79. (Previously presented) The system of claim 72, wherein the mobile devices transmit and receive voice communications over the local-area wireless communication system and the wide-area wireless network.

80. (Previously presented) The system of claim 72, further comprising:

a mail server operating on the LAN and having access to a wide-area computer network, the mail server being configured to send and receive electronic messages over the wide-area computer network and the LAN;

wherein the redirector is further configured to forward electronic mail messages from the mail server to the mobile devices.